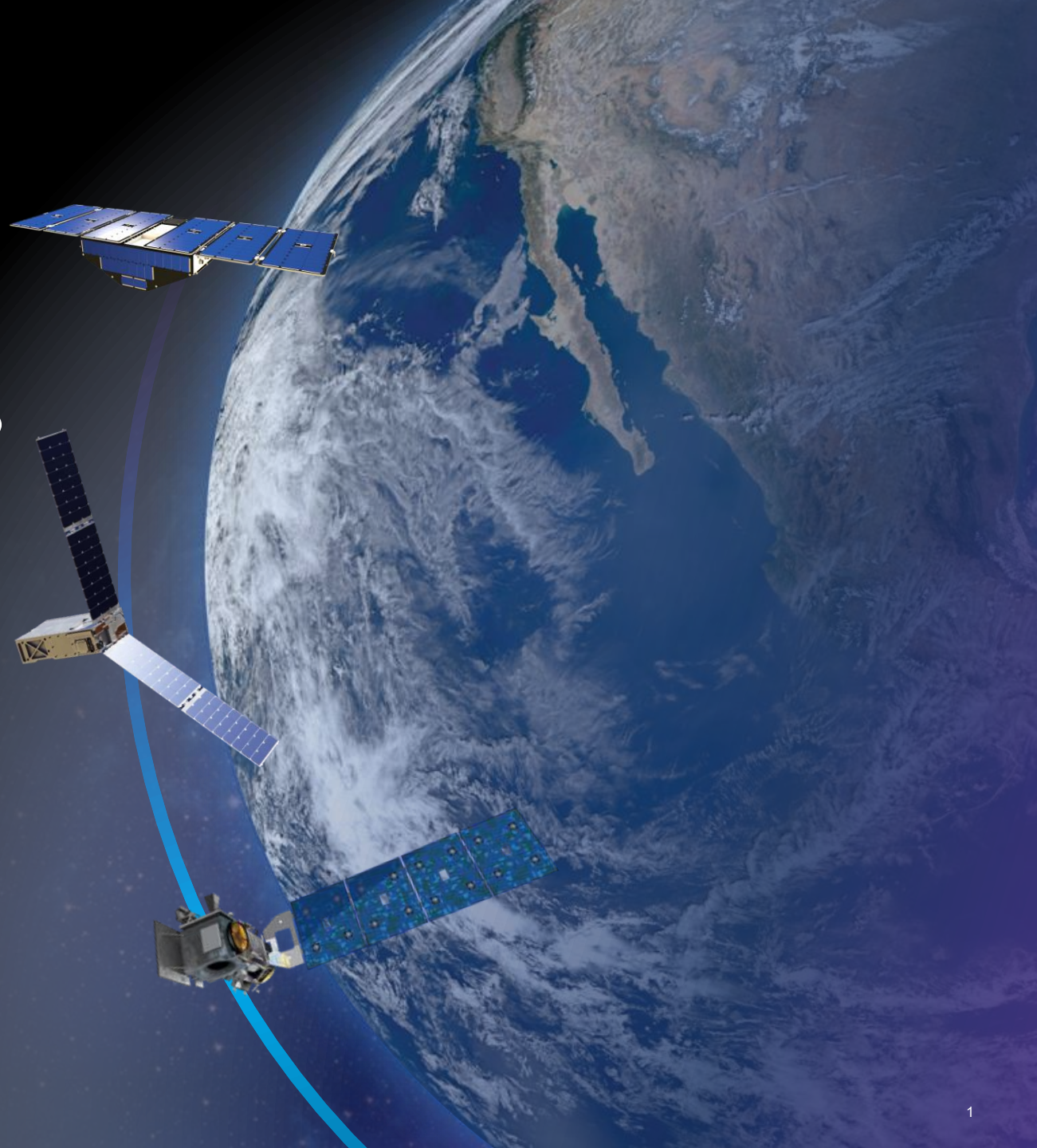
National Aeronautics and Space Administration

Science as a Service: What SmallSat Providers Need to Know



Beth Weinstein

DEPUTY ASSOCIATE DIRECTOR, FLIGHT PROGRAM

Earth Science Division/SMD, NASA

AUGUST 25, 2026

NASA Ignited

- **FAST**: in the processes we implement (acquisitions, selections, implementation)
- **INNOVATIVE**: Legacy missions retire to enable new technology and new missions to maximize discovery potential
- **PARTNERED:** Transition to Science as a Service for sustained observation missions
- **ALIGNED**: Technologies for Earth observation advance exploration missions and industry
- **UNIQUE**: Mission science focused on NASA-unique knowledge
- **IMPACTFUL:** Supporting State and Local Resilience



NISAR Launch
July 30, 2025



What is Science as a Service?

- Science as a Service (SaaS) is using existing industry capabilities and signaling future needs to enable science faster
- NASA continues its exploration role, advancing remote sensing capabilities that keep both American industry and NASA discoveries on the cutting edge
- SaaS RFI released March 2026 to obtain community feedback on
  - Commercial Technology Needs
  - Pathways for Commercial Use
  - Streamlined Access to Space and Integration Support
  - Partnerships and Community Ecosystem
  - Program, Funding Models, and Milestone Structures

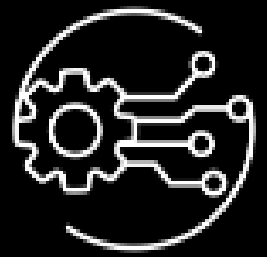
SaaS: “Faster to Science” Initiatives

- Implementing changes to accelerate time to launch and operations
- Current “Faster to science” initiatives include:
  - Simplifying internal processes
  - Streamlining of acquisition processes
  - Leveraging commercial approaches
  - Using multi-vendor contracts
  - Targeting faster development timelines in solicitations



SaaS: Commercialization Initiatives

Leveraging commercial capabilities across its entire portfolio to improve cost-effectiveness and resource utilization.



Critical technology and commercialization pathways investments



Commercial and/or consolidated Mission Operations



Commercial mission concepts



Private partnerships to maximize taxpayer value from national assets



Commercial contracting approaches

SaaS: Additional Commercialization Initiatives Using Commercial Data

- Commercial Satellite Data Acquisition (CSDA) Program
  - Acquisition of scientifically valuable commercial data for NASA's research community
  - Faster access, reduced operational costs, and seamless integration across all science domains
- Expanding Commercial Data Use through Calibration
  - Benefits of calibrated commercial data for NASA and industry
  - Pathways to calibration through NASA-industry collaboration

NASA CSDA Commercial Data Portfolio

Broadening access to diverse, complementary Earth observation capabilities

National Aeronautics and Space Administration

OPTICAL/ MULTISPECTRAL

- AIRBUS
- planet.
- BLACK SKY
- SATELLOGIC
- IGI
- SATLANTIS
- Vantor

HYPERSPECTRAL (VNIR-SWIR)

- planet.
- pixxel
- TELEDYNE BROWN ENGINEERING
- KUVA SPACE
- WYVERN
- OSK

SAR

- AIRBUS
- Capella Space
- ICEYE
- UMBRA
- MDA SPACE

GNSS (RO/R)

- PLANETIQ
- spire
- MuonSpace

THERMAL INFRARED

- Hydrosat
- OroraTech

PRECIPITATION/ MICROWAVE

- tomorrow.io

ATMOSPHERIC/ GHG

- GHGSAT
- SATLANTIS

DEM/ ELEVATION

- AIRBUS
- Vantor

DIVERSE
Broad set of commercial partners and capabilities

COMPLEMENTARY
Complements NASA's Earth observations

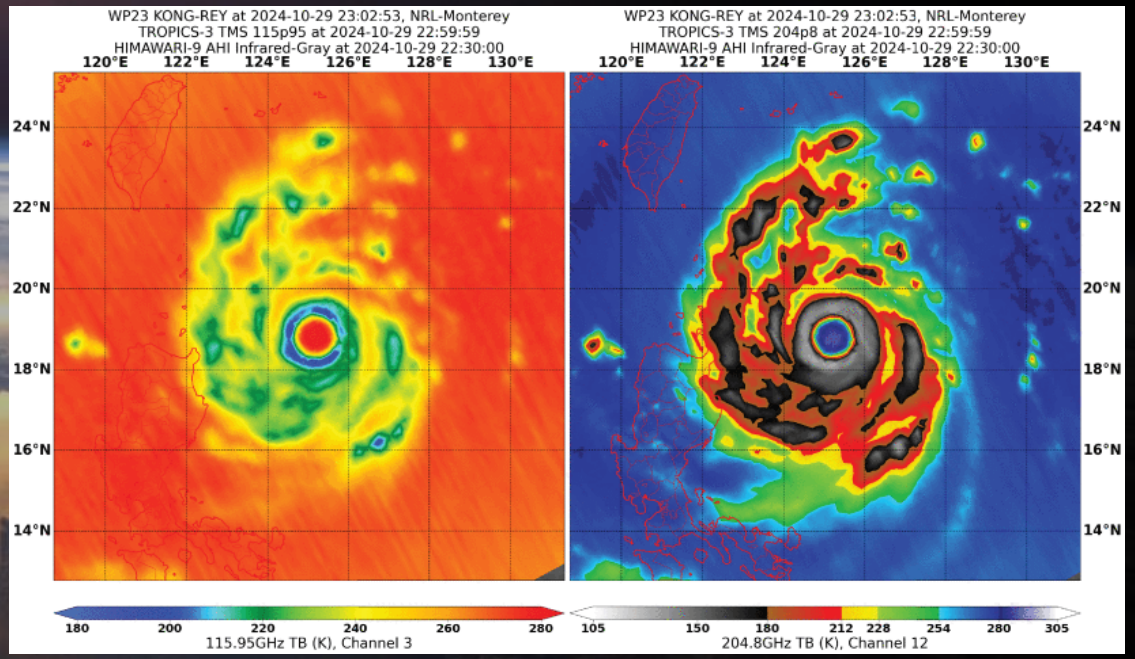
RESPONSIVE
Rapid access to data for timely decision making

ACCESSIBLE
Structured delivery framework broadens U.S. government access.

FALCON-Radiometry

Competed Commercial Capability

- Radiometry provides critical background temperature and water vapor fields that enable all other FALCON capabilities
- Sought innovative mission concepts for commercially-owned and operated microwave radiometry observations to fly in formation with the FALCON missions; RFI yielded a variety of mission concepts with varying capabilities under evaluation
- Status: Radiometer synergy study in work and solicitation planned for FY27
- Target launch: 2029, 2030



Imagery from the NASA TROPICS mission of Typhoon Kong-rev. The TROPICS microwave radiometer has been transitioned to industry and is now flown and operated by Tomorrow.io (Figure from Blackwell et al. 2025).

Upcoming SaaS Opportunities



FY26

Sustained Land Imaging (SLI) Industry Day

Mission Announcement for Partnership Potential (AFPP)

FY27

CSDA vendor rolling on-ramps start

Earth Venture Orbital (EVO)-1 Solicitation

FALCON Radiometer Solicitation

Commercial MOC Draft Solicitation

FY28

Venture Tech Accelerator (VTA) Solicitation



Exploring the secrets
of the universe for
the benefit of all.

nasa.gov